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| 10/575,996 | 11/09/2006 | Ferdinand Wiener | 06-284 | 9377 |
| 20306 | 7590 | 05/11/2010 | | |
| MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP 300 S. WACKER DRIVE 32ND FLOOR CHICAGO, IL 60606 | | | EXAMINER | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|------------------------------|--------------------------------------|--------------------------------------|
| Office Action Summary | Application No. 10/575,996 | Applicant(s) WIENER ET AL. |
| | Examiner Jiping Lu | Art Unit 3743 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 29 January 2010.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 9-30 and 32-41 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 9-28,32-34 and 36-41 is/are rejected.

7) Claim(s) 29,30 and 35 is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____

5) Notice of Informal Patent Application
 6) Other: _____

DETAILED ACTION

Claim Status

1. Claims 1-8 and 31 are cancelled. Claims 9-30 and 32-41 are now in the case.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 9-11, 13-16, 18-21, 24, 27-28, 32-34 and 36-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Champlin (U. S. Pat. 3,048,383) in view of Grenci et al. (U. S. Pat. 5,906,055).

Champlin discloses a method and an apparatus for drying treated articles 11, the treated articles 11 being transported along a predefined transport path, with a first gas stream being blown from above onto the treated articles 11, and a second stream of a gaseous drying medium being blown from below onto the treated articles 11. The first and second gas streams are generated by corresponding fan means 39, 40 and/or damper/flap 59 and regulated in feed lines 53 to respective gas outlet devices 36. The treated articles 11 are continuously conveyed in along the transport path for drying and conveyed out after drying by transport means 12, 13. The gas outlet devices 36 are in the form of a nozzle that includes a nozzle plate 33, 34 having apertures 35 facing towards the transport path. However, Champlin does not show a temperature of the first and/or second gas stream is detected, and the fan means for generating the first and/or second gas stream are controlled in such a way that the temperature detected is regulated to a

predefined value. Grenci et al. teach a concept of regulating the gas stream temperature by controlling the fan rotation speed in response to the gas stream temperature detected by the temperature sensor 41 (see col. 1, lines 42-48, col. 7, line 33 to col. 8, line 12, figures 8, 9). The gas stream pressure is also regulated by valve 42 based on detected gas pressure from a pressure sensor 40. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method and apparatus of Champlin to regulate the gas flow temperature by controlling the fan rotation speed based on the detected gas steam temperature and to regulate the pressure based on the detected gas pressure as taught by Grenci et al. in order to more efficiently control the gas stream temperature and pressure and obtain a predictable gas temperature and pressure control result. For claims 39 and 41, see openings 27, 28 of Champlin.

4. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Champlin (U. S. Pat. 3,048,383) in view of Grenci et al. (U. S. Pat. 5,906,055) as applied to claim 11 above, and further in view of Leap (US 2003/0136019 A1).

The apparatus of Champlin as modified by Grenci et al. as above includes all that is recited in claim 12 except for the nozzle apertures include elongated slits. Leap teaches a drying apparatus with nozzle apertures including elongated slits 30 same as claimed. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the apparatus of Champlin to include a nozzle with elongated slits as taught by Leap in order to obtain a predictable drying result.

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5. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Champlin (U. S. Pat. 3,048,383) in view of Grenci et al. (U. S. Pat. 5,906,055) as applied to claim 8 above, and further in view of Thome (U. S. Pat. 3,446,273).

The apparatus of Champlin as modified by Grenci et al. as above includes all that is recited in claim 17 except for the pressure sensor means arranged between the respective regulating means and the gas outlet device. Thome teaches an apparatus for drying article 7 comprising pressure sensor means 81 arranged between the respective regulating means 83 and the gas outlet devices 11 for detecting a pressure generated by the respective gas flow. The control means 100 controls the regulating means 82 in dependence on the pressure detected by the respective pressure sensor means 81. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the apparatus of Champlin to include pressure sensor means arranged between the regulating means and the gas outlet device as taught by Thome in order to more efficiently control the gas pressure.

6. Claims 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Champlin (U. S. Pat. 3,048,383) in view of Grenci et al. (U. S. Pat. 5,906,055) as applied to claim 8 above, and further in view of Hochstrasser et al. (U. S. Pat. 4,113,977).

The apparatus of Champlin as modified by Grenci et al. as above includes all that is recited in claims 22-23 except for an evacuation duct, an extraction means, a pressure sensor means and a control means for controlling extraction means based on the pressure detected by the pressure sensor. Hochastrasser et al. teach an apparatus for drying article 54 comprising an evacuation duct 38, an extraction means 82, a pressure sensor 90 and a control means 94 same as claimed. The control means 94 controls the extraction means 84 in such a way that a pressure

detected by the pressure sensor means 90 is maintained at a constant predefined value (see Fig. 7). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the apparatus of Champlin to include an extraction duct, an extraction means, a pressure sensor and a control means for controlling the extraction means based on the pressure detected by the pressure sensor as taught by Hochastrasser et al. in order to more efficiently control the drying.

7. Claims 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Champlin (U. S. Pat. 3,048,383) in view of Grenci et al. (U. S. Pat. 5,906,055) as applied to claim 8 above, and further in view of Melgaard (U. S. Pat. 5,263,265).

The apparatus of Champlin as modified by Grenci et al. as above includes all that is recited in claims 25-26 except for an intake duct for fresh gaseous drying medium and control means for controlling the heating means based on the detected gas temperature in the gas feed line. Melgaard teaches an apparatus for drying article 26 comprising an intake duct (at 30.2) for fresh gaseous drying medium and a temperature sensor 32 and at least one gas heating means 22, 24. Control means 34.1 controls the gas heating means in such a way that the temperature detected by the temperature sensor 32 is regulated to a predefined value. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the apparatus of Champlin to include fresh gas intake duct and temperature control means for controlling the heating means based on gas temperature detected by the temperature sensor as taught by Melgaard in order to more efficiently control the drying.

Allowable Subject Matter

8. Claims 29-30 and 35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. Applicant's arguments with respect to claims filed on 1/29/10 have been considered but are not persuasive to overcome the prior art rejections. First, broad claims presented fail to structurally define over the prior art references. The applicant is requested to point out from the broad claims presented exactly which limitation(s) that the prior art references fail to teach or show. The claims as amended recited an apparatus and a method "for" drying treated articles. The Champlin also shows an apparatus and a method "for" drying treated articles same as broadly claimed device and method. There is no structural difference between the claims and the prior art references. The prior art references also capable of performing the broadly claimed functions. Second, on pages 12 -13 of the Remarks, the applicant argues that the Champlin patent is not a dryer. This line of arguments is totally without merits because there is not structural distinction between the broad claims and the prior art references. Third, on page 13 of the Remarks, the applicant argues that Champlin uses indirect heating. However, the claims presented do not structurally define over such indirect heating. Moreover, claims mention nothing about direct or indirect heating. Fourth, on pages 13-14 of the Remarks, the applicant argues that the Champlin and Grenci patents teach away from combining the gas compressor of Grenci with the furnace of Champlin to provide direct heat suitable for use as a dryer. The line

of arguments also is not persuasive because the applicant must focus the claims at issue. The claims presented mention nothing about direct or indirect heating in combination of compressor. The applicant appears to attack each and every prior art references but would not recognize the teaching of Grenci patent. It must be noted that Grenci patent was used to teach a concept of regulating the gas stream temperature by controlling the fan rotation speed in response to the gas stream temperature detected by the temperature sensor 41 (see Figures 8, 9). The gas stream pressure is also regulated by valve 42 based on detected gas pressure from a pressure sensor 40. Therefore, it is the examiner's position that it would have been obvious to one skilled in the art to modify the method and apparatus of Champlin to regulate the gas flow temperature by controlling the fan rotation speed based on the detected gas steam temperature and to regulate the pressure based on the detected gas pressure as taught by Grenci et al. in order to more efficiently control the gas stream temperature and pressure and obtain a predictable gas temperature and pressure control result. In the formulation of obviousness rejections under 35 USC 103 above, it is in view of the combined teaching of the prior art references that all the claimed elements were known in the prior art references, one skilled in the art would have found it to be obvious to combine the elements as claimed by know method or means with no change in their respective functions, and the combination would have yielded predictable results to on ordinary skill in the art at the time of the invention. (KSR International Co. v. Teleflex, Inc. 82 USPQ 2d 1385 (2007). Finally, on pages 14-15 of the Remarks, the applicant argues that the teachings of the Champlin and Grenci patents would not result into the claimed invention because the invention only requires one and the same fan means for generating the gas stream and regulating the temperature. This is true in any convective heating. The same air stream is used for generating

gas circulation and regulating the temperature. The claims presented simply do not preclude such a reading of the prior art references. The examiner must accord each claim limitation its broadest reasonable interpretation. Claims presented remain unpatentable.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jiping Lu whose telephone number is 571 272 4878. The examiner can normally be reached on Monday-Friday, 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, KENNETH RINEHART can be reached on 571-272-4881. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jiping Lu/
Primary Examiner
Art Unit 3743

J. L.